



- Gate 5 needs relocated or realigned with the public road. Vehicles are required to stop after passing through a gate to make sure the gate closes properly. At Gate 5, vehicles must stop in the public road after passing through the gate and may block traffic on the road.
- Unmanned Aircraft Systems (UAS) development is planned throughout the northern region; impacts to BRW are unknown thus far.

2.0 INVENTORY OF EXISTING CONDITIONS

Existing conditions at BRW were evaluated through review of prior planning, airport records, on-site visits, and interviews with stakeholders. Data related to the following topics were collected: airspace, NAVAIDs, air traffic control, airport facilities, aircraft operations/enplanements, facility conditions, maintenance and operations, environmental issues, maps, land use regulations, and zoning for the NSB.

Project staff conducted interviews by phone and during a site visit in Utqiagvik on February 9 and 10, 2023. Members of the project team spoke with DOT&PF and NSB staff, ASRC representatives, and airport tenants. Inventory information from the prior airport master plan has been incorporated into this updated plan where data remains correct and relevant.

The information collected from the interviews and site visit was subsequently used in assessing existing conditions, developing aviation forecasts, and determining facility requirements.

2.1 Airport Ownership and Classifications

2.1.1 Airport Ownership

BRW is a commercial, public use airport and is operated and maintained by DOT&PF. The airport operates 14.5 hours per day from 0600 to 2030 depending on staffing. DOT&PF recently moved into its new Airport Aircraft Rescue and Fire Fighting (ARFF)/SREB building and is in the process of selling its former ARFF/SREB. Most other airport facilities are owned and operated by airport users, the FAA, National Weather Service (NWS), and utility companies.

2.1.2 Airport Classifications

According to FAA's *National Plan of Integrated Airport Systems (NPIAS) 2023-2027* report, BRW's role is classified as a Public, Commercial Service — Primary Non-hub airport. Service levels reflect the type of services an airport provides its community, as well as representing funding categories set up by the U.S. Congress (Congress) to assist in airport development. NPIAS defines a Commercial Service — Primary Non-hub Airport as one that receives less than 0.05 percent but more than 10,000 of the annual U.S. commercial enplanements.

The 2019 *Alaska Aviation System Plan (AASP)* classifies BRW as a Regional Hub Airport, one of 28 airports in this classification in Alaska. Regional Hub Airports are typically economic and transportation hubs for more than one community that often support large commercial and



military aircraft; have instrument approaches with low minimums; and have more landside facilities, infrastructure, and services than smaller public-use airports.

BRW is certificated under 14 Code of Federal Regulation (CFR) Part 139 as a Class I airport, allowing scheduled operations of large air carrier aircraft and unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft. The certification specifies the airport will provide certain emergency response services for aircraft with more than 30 passenger seats and will provide runway maintenance services such as snow and ice control when needed. DOT&PF requires all scheduled carriers to file a request for a landing permit to ensure any changes or delays in scheduled flights can be accommodated. Non-scheduled aircraft with more than 30 passenger seats must also obtain prior permission from the airport manager to land to confirm trained emergency responders are available.

BRW is a Transportation Security Administration (TSA) Category III Non-Hub Primary airport with an Airport Security Program (ASP). BRW averages one daily TSA-regulated air carrier flight via Alaska Airlines, and one daily charter/regional commuter flight with Wright Air Service, Inc. (Wright Air).

2.2 Historical Background

In 1964, construction of the Utqiagvik airfield was completed with a 5,000-foot-long gravel strip – long enough for small aircraft to land. In 2012, Runway 8/26 was extended and widened at its current location. Today the airport has a 7,100-foot-long x 150-foot-wide paved runway that supports daily passenger and cargo flights by jet, turbine, and piston aircraft.

The airport's major developmental milestones are listed below.

- 1960 - Gravel runway construction begins
- 1964 - Gravel runway completed (5,000 feet x 150 feet)
- 1968 - Runway extended to 6,500 feet and paved
- 1974 - Apron expanded
- 1983 - Runway resurfaced and east end painted white to reduce permafrost thaw
- 2003 - Gravel apron between Taxiways B and C expanded
- 2012 - Major runway and apron reconstruction, including shifting the runway 210 feet south and addressing runway safety area standards
- 2014 – Airport Master Plan Update
- 2017 – Partial perimeter fencing with a card reader access control system on some of the gates
- 2018 - 2020 – ARFF/SREB and chemical storage buildings and runway/taxiway/apron rehabilitation.



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2.2.1 Historic Airport Improvement Program Funding

FAA's Airport Improvements Program (AIP) provides grants to public agencies to improve and develop public-use airports. DOT&PF has used AIP funds, along with some matching funds, to pay for most of the infrastructure improvements and major rehabilitation at BRW. Aviation taxes collected from aviation users throughout the country finance the AIP Trust Fund. In general, AIP money is for airfield capital improvements or repairs except improvements related to terminals, hangars, or non-aviation development.

BRW competes for AIP funds with other regional airports. DOT&PF regions nominate projects and an Aviation Project Evaluation Board rates and scores the projects using a set of aviation criteria including: safety; health and quality of life; economic development; maintenance and operations issues; and local capital contribution to project cost. Since 1984, more than \$131,107,954.00 in AIP funding has been spent on improvements to BRW. Table 2-1 lists projects funded by AIP grants.



Table 2-1. Historic AIP Funding for BRW Since Federal Fiscal Year 1984

| Federal Fiscal Year | AIP Project Description | Total |
|---------------------|--|----------------------|
| 1984 | Rehabilitate Apron | \$521,185 |
| 1986 | Rehabilitate Taxiway, Expand Apron, and Install Lighting | \$3,134,551 |
| 1988 | Acquire ARFF Vehicle | \$295,783 |
| 1990 | Construct Apron, Improve RSA, and Install Lighting | \$2,594,168 |
| 1992 | Improve ARFF Building | \$2,200,515 |
| 1998 | Conduct Airport Master Plan Study | \$247,259 |
| | Improve Snow Removal Equipment Building | \$1,688,688 |
| 2001 | Expand Apron | \$3,024,161 |
| 2002 | Extend RSA and Rehabilitate Apron and Runway | \$23,999,664 |
| 2003 | Rehabilitate Runway and Construct RSA | \$5,799,999 |
| 2005 | Acquire ARFF Vehicle and Snow Removal Equipment | \$907,350 |
| 2006 | Acquire Snow Removal Equipment | \$262,064 |
| 2008 | Rehabilitate Runway and Construct RSA | \$3,389,973 |
| 2009 | Acquire Safety and/or Security Equipment | \$95,500 |
| 2010 | Construct RSA | \$8,048,184 |
| 2012 | Airport Master Plan Update | \$533,729 |
| | Acquire Snow Removal Equipment | \$300,000 |
| 2014 | Rehabilitate Runway and Install Runway Lights | \$3,987,582 |
| | Acquire Snow Removal Equipment | \$258,106 |
| 2015 | Rehabilitate Runway | \$68,248 |
| 2016 | Construct Sand & Chemical Storage Bldg., SREB and ARFF Bldg. | \$13,146,509 |
| | Rehabilitate Runway Various Surface Preservation Maintenance | \$68,668 |
| 2017 | Acquire Interactive Training System Various 139 Airports | \$17,165 |
| | Rehabilitate Runway Surface Preservation Maintenance | \$67,628 |
| | Install Partial Perimeter Fencing | \$700,000 |
| | Acquire Snow Removal Equipment | \$309,694 |
| 2018 | Acquire ARFF Vehicle | \$787,092 |
| | Design/Mobilize Rehabilitate Runway, Taxiway & Lighting | \$12,261,640 |
| 2019 | Rehabilitate Runway, Taxiway, and Lighting | \$8,070,516 |
| | Construct Sand and Chemical Storage Bldg., ARFF Bldg., SREB | \$18,927,061 |
| | Install Miscellaneous NAVAIDs & Various Visual Aids (VISAIDs) | \$350,000 |
| 2020 | Construct SREB, ARFF Building | \$7,889,427 |
| | Construct Service Road | \$936,321 |
| | Rehabilitate Runway | \$5,203,371 |
| 2021 | Coronavirus Response and Relief Supplemental Appropriation Act Funds | \$1,015,793 |
| Total | | \$131,107,594 |

Source: DOT&PF, alaskaasp.gov, 2023



Table 2-2 lists the distribution of AIP funds by project type. Since 1984, approximately 61 percent of AIP funds have been awarded to runway and taxiway projects, 34 percent to building projects, and about five percent to fencing, planning, equipment, and other small projects.

Table 2-2. AIP Funding Distribution Since 1984 by Project Type

| Type of Project | Percent |
|-------------------------------|------------|
| Runways, Taxiways, Aprons | 61 |
| Buildings | 34 |
| Fencing /Security | 0.6 |
| Planning/Aeronautical Studies | 0.6 |
| Equipment | 2.4 |
| Other | 1.4 |
| Total | 100 |

2.3 Revenues and Expenses

Airport revenues come from leasing airport land as well as concession and other fees. There are no landing fees. Airport expenses are primarily from airport operations and maintenance staff, equipment, and supplies. Table 2-3 recaps revenues and expenses for the last five fiscal years. In Fiscal Year (FY) 2022, BRW reported \$254,192 in Leasing Revenue and \$1,922,350 in Operation and Maintenance (O&M) Expenditures. Revenue minus expenses for the year totaled -\$1,668,158.

Table 2-3. BRW Revenues and Expenses Fiscal Years 2018-2022

| | FY 2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|
| Leasing Revenues (\$) | 199,843 | 218,793 | 273,911 | 264,771 | 254,192 |
| O&M Expenses (\$) | 1,837,668 | 1,538,039 | 1,789,523 | 1,860,445 | 1,922,350 |

FY = Fiscal Year

O&M = Operation and Maintenance

2.4 Property Ownership and Land Uses

BRW property is comprised of five tracts totaling 856 acres. Due to Section 16 of the Federal Airport Act of 1946, the U.S. Bureau of Land Management (BLM) conveyed 668.42 acres of Tract I to the State of Alaska under Patent No. 50-68-0175 (Lot 1, US Survey 4227) on February 13, 1968. In 1967, DOT&PF acquired 33.83 acres of Tract I from the BLM through a trustee deed conveyance. Another 26.87 acres of Tract I was granted from the State of Alaska Department of Natural Resources (ADNR) with an Interagency Land Management Transfer (ILMT) conveyance document in 1967. In 1977, BRW acquired an additional 26.61 acres of Tract I from UIC. Tract I contains the runway, cemetery, and a portion of Isatkoak Lagoon. Tract III is 0.71 acres and contains airside and landside facilities and lease lots. Tract III was acquired with statutory warranty deeds from M.O. Ehredt and Barrow Utilities and Electric Cooperative, Inc. Tract IV is 2.285 acres and contains lease lots and Apayauk Street. BRW has an aviation



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easement from a townsite trustee for Tract IV. Tract V is 26.61 acres located east of Isatkoak Lagoon. BRW has a right-of-way (ROW) for Tract V with UIC. Tract VII is 47.2 acres and lies west of Apayauk Street and the boundary extends beyond the Chukchi Sea shoreline. Tract VII is owned by ADNR and the City of Utqiagvik.

The NSB has zoned BRW property as Industrial, and zoned land north of BRW as Suburban and Multi-Use. South of BRW, property is owned by UIC and zoned Industrial with mostly undeveloped wetlands except for an abandoned gas line, several cultural sites, and the NWS facility adjacent to Emaiksoun Road. The City of Utqiagvik has long-term plans to develop an 85-acre residential subdivision southwest of BRW off Nunavaaq Street. Isatkoak Lagoon is the community's water supply located east of the runway. When frozen, the lagoon provides access to subsistence activities to the south. West/southwest of BRW are two material sources, one owned by UIC and one on airport property. According to Land Occupancy Maps, land north and southeast of Ahkovak Street is classified as non-aeronautical use.

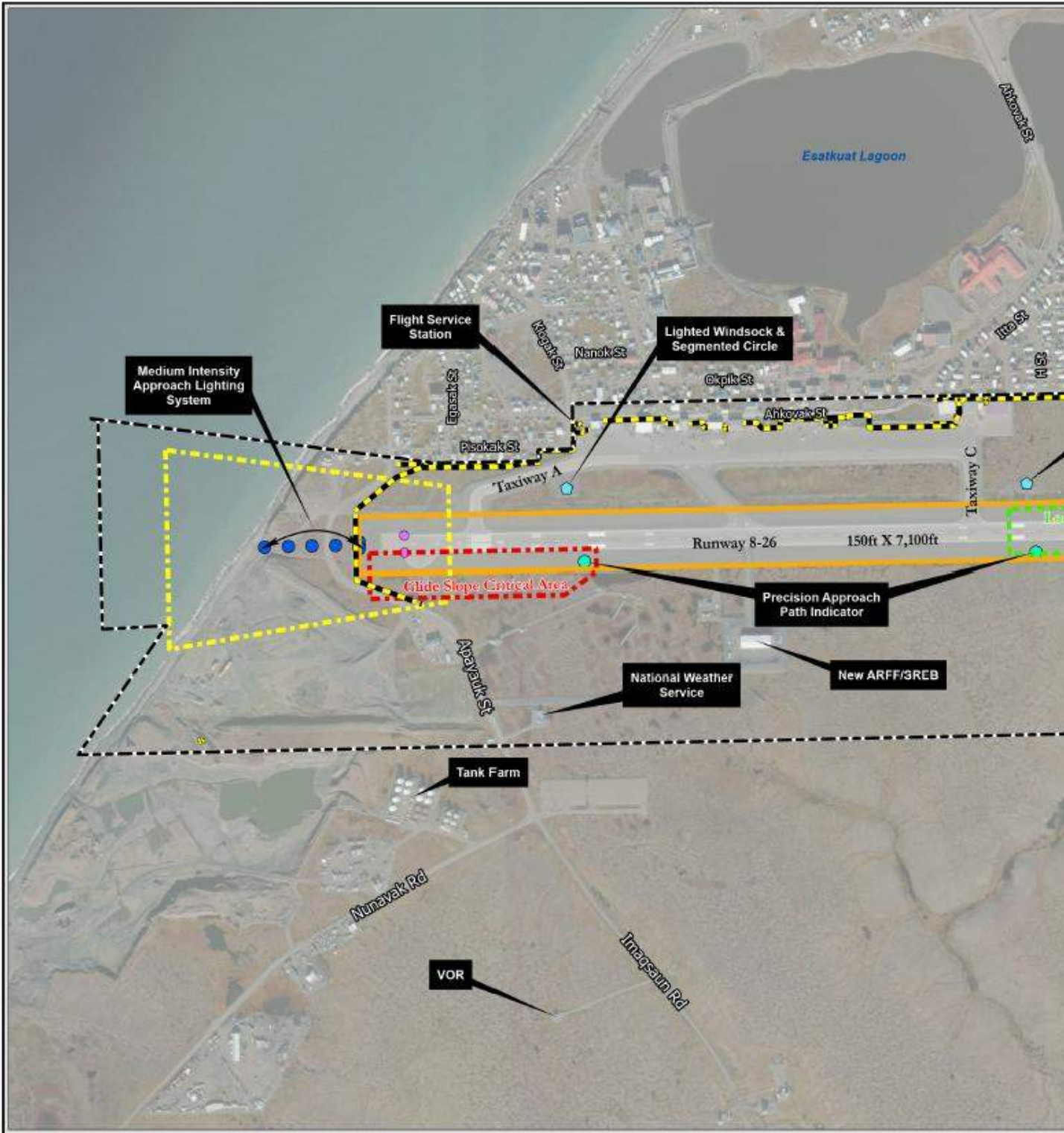
2.5 Airside Facilities

The existing BRW airside facilities are described in this section. Data was gathered from research, the prior master plan, stakeholder interviews, and a field reconnaissance visit to the airport.



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Figure 2-1 depicts the runway and other airport facilities. Table 2-4 lists runway data for Aircraft Approach Category (AAC) and Airplane Design Group (ADG).

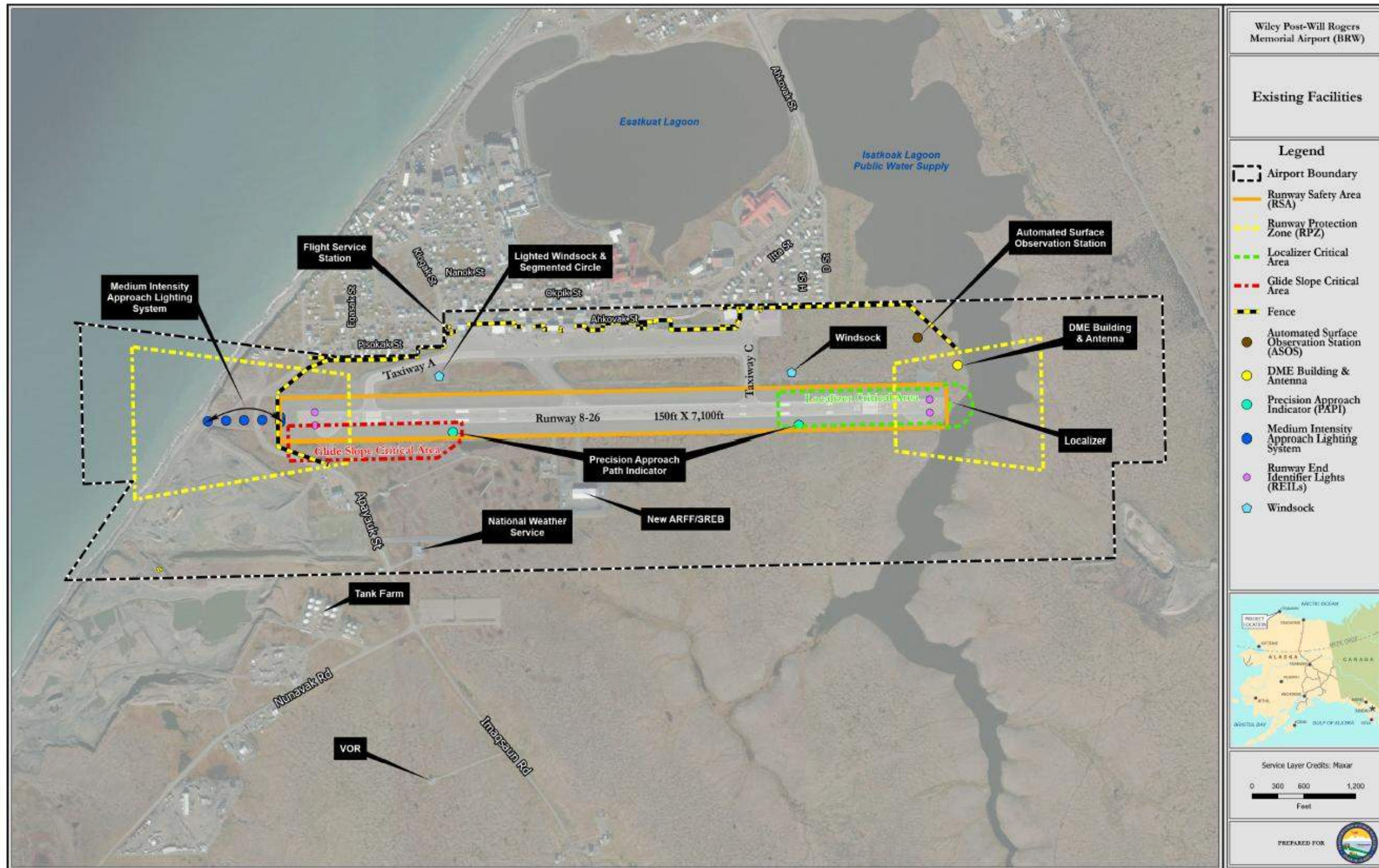


Figure 2-1. Existing Facilities

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2.5.1 Runway

2.5.1.1 Runway Design Code

The Runway Design Code (RDC) is the basis for design standards for a runway and provide for optimal safe operations by the critical aircraft under certain meteorological conditions. FAA establishes airport design standards in AC 150/5300-13B. According to this AC, the RDC has three components: 1) The AAC groups aircraft based on a reference landing speed (V_{REF}) of the critical aircraft for the runway; 2) The ADG is determined from the wingspan and tail height of the critical aircraft for the runway; 3) The lowest visibility as defined as Runway Visibility Range (RVR) published on an instrument approach chart. Table 2-4 lists the FAA AAC and ADG for BRW.

The critical aircraft is the most demanding aircraft type with similar physical and operational characteristics that regularly use an airport/runway. Regular use is defined as 500 annual operations, excluding touch-and-go operations on a specific runway. The critical aircraft for BRW from the current ALP is a B737-700, which has an AAC of C and an ADG of III. The 2016 ALP lists the RDC for Runway 8 as C-III-2400 and Runway 26 as C-III-5000. The ultimate RDCs listed for Runway 8 is D-III-2400 and Runway 26 is D-III-4000.

Table 2-4. FAA AAC and ADG

| Aircraft Approach Category | | Airplane Design Group | | |
|----------------------------|----------------|-----------------------|---------------|--------------|
| Aircraft Approach Speed | | Wingspan | | Tail Height |
| Type | Speed (knots) | Type | Size (feet) | Size (feet) |
| A | Less than 91 | I | Up to 49 | < 20 |
| B | 91–120 | II | 49–78 | 20–29 |
| C | 121–140 | III | 79–117 | 30–44 |
| D | 141–165 | IV | 118–170 | 45–59 |
| E | 166 or more | V | 171–213 | 60–65 |
| | | VI | 214–262 | 66–79 |

Source: FAA AC 150/5300-13B



2.5.1.2 *Size and Orientation*

BRW has a grooved, asphalt concrete runway, designated 08/26, measuring 7,100-feet-long x 150-feet-wide. The thresholds are displaced 600 feet due to the lagoon on the east end and ocean on the west end, and each runway end has "elephant ears" to allow large aircraft to turn around. Runway declared distances resulting from the displaced thresholds are listed in Table 2-5.

Table 2-5. BRW Declared Distances Runway 8/26

| Measurement | Declared Distance (feet) |
|---|--------------------------|
| Takeoff Run Available (TORA) | 7,100 |
| Takeoff Distance Available (TODA) | 7,100 |
| Accelerate Stop Distance Available (ASDA) | 6,500 |
| Landing Distance Available (LDA) | 5,900 |

Source: ALP 2016

The runway is oriented east-west with prevailing winds, and the ALP reports it provides 98.0 percent wind coverage at 16 knots crosswind component.

2.5.1.3 *Runway Dimensions and Standards*

Runway 8 has an existing RDC of C-III-2,400 and Runway 26 has an existing RDC of C-III=5,000. Table 2-6 lists existing runway dimensions from the 2016 ALP and the ADG standards in FAA Airport Design AC150-5300-13B. The current runway dimensions meet or exceed the design criteria in Table 2-6 except for items listed in red which are non-standard dimensions.



Table 2-6. Runway Data

| Feature | Runway 8 C-III-2,400 (feet) | Runway Design Standards for C- III Lower than ¾ mile (feet) | Runway 26 C-III-5,000 (feet) | Runway Design Standards for C- III not lower than 1 mile (feet) |
|-----------------------------------|--------------------------------|--|---------------------------------|---|
| Runway Length | 7,100 | To Be Determined | 7,100 | To Be Determined |
| Runway Width | 150 | 100 | 150 | 100 |
| RSA Width | 500 | 500 | 500 | 500 |
| RSA Length Prior to Threshold | 1,000 | 600 | 800 | 600 |
| RSA Length Beyond End | 800* | 1,000 | 1,000 | 1,000 |
| RPZ Dimensions Approach | 2,500 x 1,000 x 1,750 | 2,500 x 1,000 x 1,750 | 1,700 x 500 x 1,010 | 1,700 x 1,000 x 1,510 |
| RPZ Dimensions Departure | 1,700 x 500 x 1,010 | 1,700 x 500 x 1,010 | 1,700 x 500 x 1,010 | 1,700 x 500 x 1,010 |
| ROFA Width | 800 | 800 | 800 | 800 |
| ROFA Length Prior to Threshold | 1,000 | 600 | 800 | 600 |
| ROFA Length Beyond End | 1,000 | 1,000 | 800* | 1,000 |
| ROFZ Dimensions | 7,500 x 400 | 7,500 x 400 | 7,500 x 400 | 7,500 x 400 |
| POFZ Dimensions | 200 x 800 | 200 x 800 | None | N/A |

*Red text indicates non-standard conditions

RSA = Runway Safety Area; RPZ = Runway Protection Zone; ROFA = Runway Object Free Area; ROFZ = Runway Obstacle Free Zone; POFZ = Precision Object Free Zone

2.5.1.4 Building Restriction Line

Building Restriction Lines (BRL) have been defined on the north and south sides of the runway. The north side BRL is 910 feet from the runway centerline and the south side BRL is 900 feet from the runway centerline. The BRL defines the limits of development for all on-airport buildings, and must consider the runway Federal Aviation Regulations (FAR) Part 77 surfaces, ROFA, RPZ areas, navigational aid critical areas, and any other areas required for clear line-of-sight.

2.6 Taxiways

Table 2-7 lists relevant information regarding the BRW taxiways.



Table 2-7. Taxiway Data

| Feature | TDG | Width (feet) | Taxiway Safety Area | TOFA Width (feet) | Wing Tip Clearance (feet) |
|-----------|-----|--------------|---------------------|-------------------|---------------------------|
| Taxilane | 3 | 75 | 171 | 225 | 27 |
| Taxiway A | 3 | 75 | 171 | 259 | 44 |
| Taxiway C | 3 | 75 | 171 | 259 | 44 |

TDG = Taxiway Design Group; TOFA = Taxiway Object Free Area

BRW has an apron taxilane on the north side of the runway connecting to Runway 8 via angled Taxiway A. This angle is due to development along Pisokak Street. In 2020, the apron taxilane centerline was shifted to the south to avoid wingtip clearance issues between parked aircraft and taxiing aircraft.

Taxiway C is perpendicular to the runway and connects the runway to the southeast corner of the parking apron. Due to the length of the parking apron, Taxiway C connects to the runway past the touch down point but before the midpoint of Runway 8.

Taxiway B formerly was an angled taxiway that connected the midpoint of the apron to near the midpoint of the runway. Taxiway B was recently closed because it required additional winter maintenance, is not a priority movement area, and was under-utilized.

2.6.1 Helicopter Operating Areas

BRW does not have areas exclusively designated for helicopter operations. Helicopters currently operate, park, load, and unload on the east and west ends of the apron.

The North Slope Borough Search and Rescue (NSBSAR), LifeMed Alaska, and Guardian Flight provide search-and-rescue and medivac services for the region. These entities mainly use PC-24, King Air 350, Sikorsky S92, and Bell 412 aircraft. These entities provide a critical service to transport patients with medical emergencies to Fairbanks, Anchorage, or Seattle. Figure 2-2 shows the search and rescue hangar at BRW.



Figure 2-2. Search and Rescue Hangar



2.6.2 Aprons

The asphalt/concrete apron has a total area of 728,715 square feet. On the south side of the apron is a designated 75-foot-wide taxilane. Because parking on the apron can be tight due to its proximity to the taxilane, the taxilane was recently shifted to the south. The eastern portion of the apron was recently rehabilitated, and Alaska Airlines recently repaved a section of the apron within their lease lot. Figure 2-3 shows an Alaska Airlines B737 on the apron at BRW.

There is no dedicated perimeter road or service road for vehicles on the apron.



Figure 2-3. Apron in Front of Alaska Airlines Terminal

2.6.2.1 Transient Aircraft Parking

BRW has 19 tie-downs in two locations on the apron: four tie downs next to the Flight Service Station (FSS) and 15 just west of the apron fuel tanks and pumps. Some of the tie-downs are broken out from frost-jacking. Use of the tie-downs is on a first-come, first-serve basis. No fees are charged.



2.6.3 Airfield Pavement Condition Index

The runway, taxiways, and parts of the apron were resurfaced/reconstructed in 2022. Since then, DOT&PF has not completed a pavement inspection and updated the pavement condition index. The current Pavement Classification Number/Pavement Classification Rating (PCN/PCR) code is 43/F/A/X/U (PCN) according to the published Form 5010 on the FAA Airport Data Information Portal (ADIP).

The runway is rated to support 75,000 pounds for aircraft with a single landing gear configuration; 160,000 pounds for a dual landing gear configuration; and 300,000 pounds for a dual-tandem landing gear configuration (Table 2-8). Permafrost underlies the runway and frost heave causes undulations.

Table 2-8. Runway Load Bearing Capacity by Wheel Type

| Wheel Type | Gross Weight (pounds) |
|-------------------|-----------------------|
| Single Wheel | 75,000 |
| Dual Wheel | 160,000 |
| Dual Tandem Wheel | 300,000 |

Source: FAA Form 5010, 4/22/2023

2.6.4 Lighting, Marking, and Signage

BRW lighting, marking, and signage systems include:

- **High Intensity Runway Lights (HIRLs):** Runway 08-26 is equipped with HIRLs to provide positive delineation for the edge of the usable runway and to support a precision instrument approach.
- **Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR):** Runways 8 is equipped with a 1,400-foot-long MALSR to provide visual horizontal alignment guidance with the runway centerline.
- **Runway End Identifier Lights (REILs):** Runway 26 has REILs to provide positive delineation for the end of the runway threshold.
- **Medium Intensity Taxiway Lighting (MITL):** All taxiways have MITLs, which provides positive delineation for the edge of the usable taxiway. None of the lights at BRW are LED lights.
- **Apron flood lighting** is provided by DOT&PF. There is some flood lighting provided by tenants for vehicle parking on their lease lots.
- **Marking:** Runway 8/26 has precision instrument marking, meaning it supports precision instrument approaches. The precision marking is in conformance with FAA AC 150/5340-1J, *Standards for Airport Markings* and the markings are in good condition (FAA 2009a).



- **Precision Approach Path Indicators (PAPI)** Other visual aids include PAPIs. The PAPIs are installed toward the ends of Runway 8 and 26 and provide visual descent guidance over the runway threshold for visual approaches. BRW has two sets of PAPIs, which can be remotely activated by pilots for approaches.
- **Signage:** The signs at BRW follow an FAA-approved sign plan. The signs follow the version of AC 150/5340-18 in effect when they were installed.

2.7 Airspace, Nav aids, Approaches

2.7.1 Airspace

BRW is a non-towered airport within Class E airspace which is controlled by the FAA from the Anchorage Air Route Traffic Control Center (ARTCC) in Anchorage. This facility has jurisdiction of the airspace and control of all aircraft flying under Instrument Flight Rules (IFR) within Alaska. This control authority pertains to all instrument approaches and departures to and from BRW. A Remote Center Air Ground (RCAG) radio is located on the field to provide direct aircraft communication with the ARTCC. When the FSS is open, IFR clearances are relayed through the station. Otherwise, the Fairbanks Automated FSS is used.

2.7.2 Navigational Aids

NAVAIDs are physical devices on the ground, or electronic equipment that communicates with aircraft to assist with navigation. BRW is equipped with several light-based and electronic navigational aids.

- **Rotating Beacon:** The white and green rotating beacon is on the south side of the field near the regulator and non-directional beacon (NDB) site.
- **Windsock:** A lighted windsock and segmented circle are near the midpoint of the runway, between Taxiways A and B, south of the apron. The airport also has another lighted wind cone east of Taxiway C.

NDB: The Browerville Utqiaġvik NDB is just north of the VHF (very high frequency) Omni-Directional Range Radio (VOR). The NDB approach plate is no longer published because the FAA is in the process of phasing out all NDBs in Alaska.

Weather equipment: The airport is equipped with an Automated Surface Observation System (ASOS) which provides a computer-generated voice message broadcast via radio frequency to pilots in the vicinity of an airport. The ASOS is north of the approach end of Runway 26.

Runway Visual Range (RVR): The airport is equipped with a RVR system for determining visibility on the runway. This is near the ASOS, at the touchdown point of the approach end of Runway 26.

Direction Finder (DF): The DF is within the RPZ south of the rotating beacon and NDB site.



VOR/DME and ILS: BRW has VOR in combination with a Tactical Air Navigation system (VORTAC). The DME building and antenna are northeast of the runway. The ILS localizer antennas are east following the extended centerline of Runway 8, while the ILS glideslope antenna is near the weather equipment at the southwest side of the runway.

Ceiling and visibility: BRW experiences IFR conditions 21 percent of the time and is below IFR minimum weather criteria 23 percent of the time due to poor ceiling and/or visibility conditions (NOAA 2020).

There are five published instrument approaches available at BRW (FAA 2021) (Table 2-9). The airport is situated in arctic wetland terrain that is flat with little topographic change.

Table 2-9. BRW Instrument Approaches

| Instrument Approaches | | Ceiling (feet) | Visibility for All Airplane Categories (miles) |
|-----------------------|----------------------|----------------|--|
| 1. | ILS or LOC Runway 8 | 200 | 1/2 |
| 2. | LOC BC Runway 26 | 400 | 1 3/8 |
| 3. | RNAV (GPS) Runway 08 | 200 | 3/4 |
| 4. | RNAV (GPS) Runway 26 | 400 | 1 |
| 5. | VOR Runway 26 | 400 | 1 |

Source: FAA Approach Plates

ILS = Instrument Landing System; LOC BC = Localizer Back Course Approach; RNAV = Area Navigation; GPS = Global Positioning System; VOR = VHF Omni-Directional Range Radio

2.8 Landside Facilities

2.8.1 Lease Lots

Most lease lots are on the north side of the airport along Ahkovak Street. Lease lots on the south side of Ahkovak Street have apron frontage and are occupied, from west to east, by the FAA FSS, Wright Air Service, Alaska Airlines, DOT&PF old ARFF/SREB, Eskimos Inc. aircraft fueling facility, ASRC Properties, Lynden Air Cargo, and the NSBSAR hangars. With the exception of the NSBSAR Hangars, the buildings in this area are old and in need of upgrades or replacement. Many buildings have heaving floors and foundations and poor drainage. Parking is very limited. Most of the lots in this area have short lease terms, reflecting the limited investment leaseholders have made in these properties. Besides Block 700, Lot 3B, there are no unleased properties in this area. However, the old ARFF/SREB is about to be vacated and sold, an NSB warehouse on the apron recently burned, and the former undeveloped Lynden lease lots are now available for lease, but the sites have topographic challenges. The 100-foot depth of these lots complicates their developability. There is inadequate space for parking and passenger drop-off and pickup and freight. Space on the apron side of the lot is also constrained for some tenants.

Lease lots on the north side of Ahkovak Street are classified interim non-aeronautical, meaning they do not have to be used for an aviation-related reason. The interim designation is because



the prior master plan recommended that Ahkovak Street and the lease lots to the south of Ahkovak Street be shifted north. From west to east, they include several undeveloped lots and parking lots held by DOT&PF; lots leased by the City of Barrow, NSB, Lions Club, ASRC, and the FAA; and lots used for Alaska Airlines terminal parking, the King Eider Inn (Figure 2-4), and UIC Vehicle Rental. The public parking lots and Alaska Airlines parking lot are on the north side of Ahkovak Street because the lots on the south side of Ahkovak Street are too small to accommodate all necessary parking space. Except for the King Eider Inn, the Alaska Airlines parking lot, and the Barrow Lions Club, lots have very short lease terms to enable the future road realignment.



Figure 2-4. King Eider Inn

Development in Utqiagvik is expensive and challenging due to the prohibitive costs of gravel, construction materials, and labor. However, there is still demand for apron-front lease space. There is also demand for non-aeronautical lease lots due to limited developable property in Utqiagvik.

Figure 2-5 depicts lease lots at BRW. Table 2-10 lists airport leaseholders and Table 2-11 lists permits, ROWs, and easements offered to the FAA, utility companies, and others.



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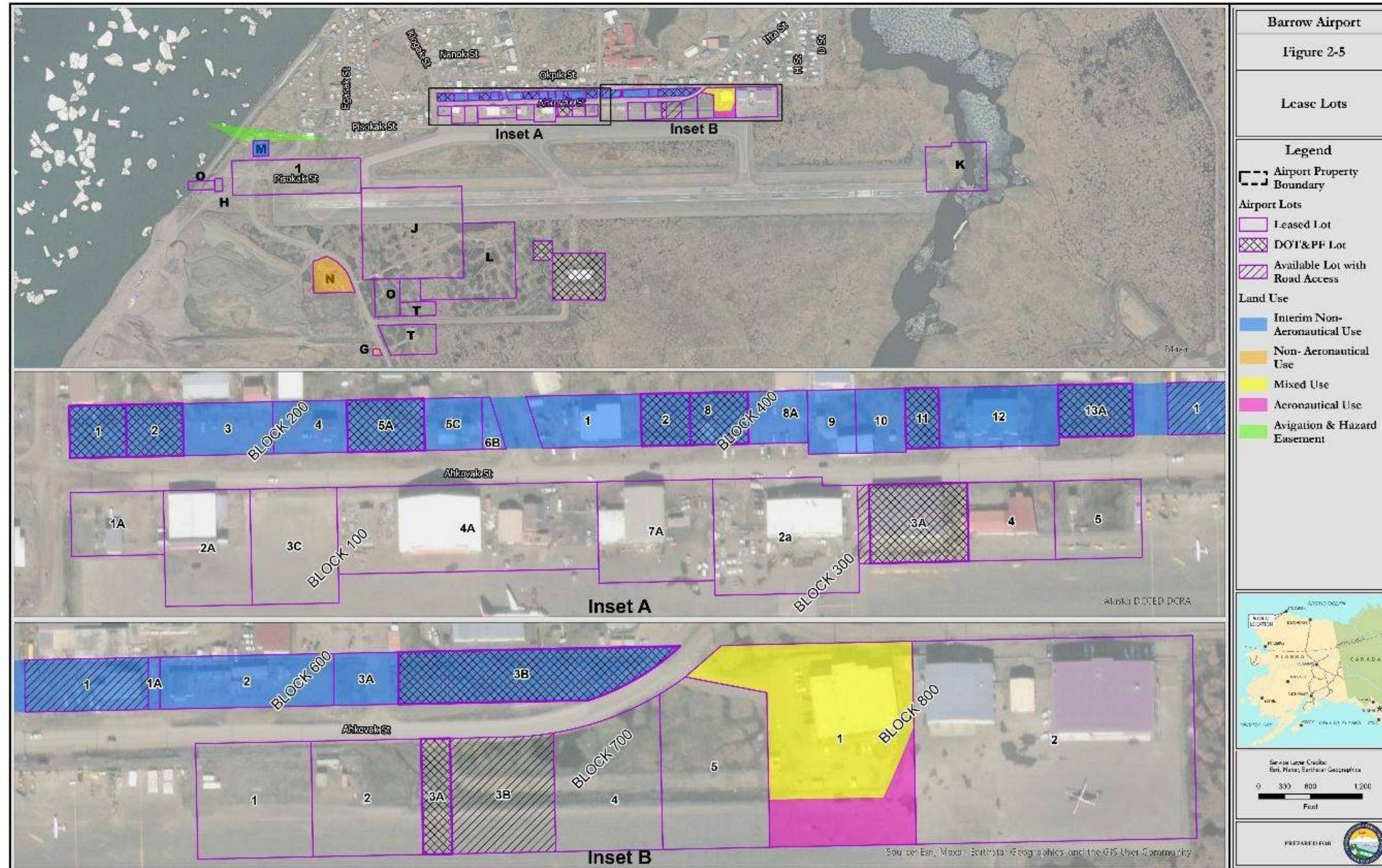


Figure 2-5. Lease Lots

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Table 2-10. Leaseholder Information

| Leaseholder | Block | Lot |
|-----------------------------------|-------|----------------|
| FAA-FSS | 100 | 1A |
| Alaska Airlines, Inc. | 300 | 2A |
| Alaska Airlines, Inc. | 400 | 8A, 32 |
| Arctic Slope Regional Corporation | 400 | 1 |
| ASRC Properties, LLC | 700 | 2 |
| ASRC SKW/Eskimos, Inc. | 600 | 2 |
| Barrow Lions Club | 200 | 6B |
| City of Barrow | 200 | 5C |
| Cornerstone Investment | 400 | 12 |
| DOT&PF | 200 | 1, 2 |
| DOT&PF | 300 | 3A |
| DOT&PF | 400 | 2, 13A |
| DOT&PF | 600 | 3B |
| DOT&PF | 700 | 3A |
| DOT&PF Snow Storage | 400 | 11 |
| Eskimos, Inc. | 700 | 1 |
| FAA MOA – RCO, Maint. Bldg., Shed | 400 | 9, 10 |
| Lynden Air Cargo, LLC | 700 | 4, 5 |
| North Slope Borough | 200 | 4 |
| North Slope Borough | 600 | 1A |
| North Slope Borough | 600 | 3A |
| North Slope Borough | 800 | 1, 2 |
| Public Parking | 400 | 8 |
| UIC Real Estate, LLC | 600 | 1 |
| Vehicle Parking Lot | 200 | 3, 5A |
| Wright Air Service | 300 | 4, 5 |
| Wright Air Service | 100 | 2A, 3C, 4A, 7A |

FSS = Flight Service Station; MOA = Memorandum of Agreement;
 RCO = Remote Communications Outlet



Table 2-11. Permits, ROWs, Easements

| Leaseholder | Parcel |
|---|--------------|
| Arctic Slope Telephone Association | G, 24 |
| Arctic Slope Telephone Association Cooperative | 26 |
| Barrow Cable TV | 23, 27 |
| Barrow Utilities and Electric Cooperative, Inc. | N, 22, 25, M |
| FAA MOA – 20-foot-wide Road Row | 4 |
| FAA MOA – ASOS | 31 |
| FAA MOA - Cable Row to Vortac | 13 |
| FAA MOA - Glide Slope ASTI Site | J |
| FAA MOA - MALSR | I |
| FAA MOA - NDB Antennas Site | L |
| FAA MOA - RAIL | O |
| FAA MOA ASTI Air Easement | Q |
| FAA MOA H-Marker Site | H |
| General Telephone Company of Alaska | 21 |
| NOAA | T |
| North Slope Borough | 19 |

ASTI = Advanced Simulation Technology, Inc.; ASOS = Automated Surface Observing System; RAIL = Runway Alignment Indicator Lights; NOAA = National Oceanic and Atmospheric Administration

2.8.2 Terminal, Cargo, and Fixed Base Operator Facilities

Alaska Airlines and Wrights Air Service offer the primary passenger and cargo facilities, though other carriers sublease space from Wright Air Service. The facilities are old and undersized. There are no public-owned and operated terminals, and the NSB is evaluating whether to develop a public terminal. There is an old terminal previously operated by Ravn Alaska that is not currently in use.

The Alaska Airlines terminal and cargo facility (Figure 2-6) is the largest passenger terminal facility at BRW. The two-story facility, built in 1998, includes a TSA passenger screening area, baggage claim, cargo services counter, passenger ticket stations, passenger waiting area, and restrooms. The attached garage provides space for equipment and cargo. The second story houses offices and rooms for equipment and supply storage. The terminal building is old and not large enough for purpose. There is no conveyor belt for luggage, inadequate seating, and people are exposed to the harsh weather when enplaning and deplaning.

2.8.3 Commercial Passenger Terminal Facilities

There are no Fixed Base Operator (FBO) facilities, but Eskimos Inc. provides full-service aircraft fueling with trucks from storage tanks on Block 600, Lot 2. Eskimo Inc demolished the self-fueling tanks and brought in new tanks but has not yet installed them.



2.8.4 Roads and Parking

Ahkovak Street, on the north side of the airport, provides access to the terminal and cargo areas, tie downs, old ARFF/SREB, and non-aeronautical properties (Figure 2-7). Security Gates 3 through 16 are located along Ahkovak Street. Intersecting Ahkovak Street are Kiogak and Momegana streets which provide access to downtown heading north/south.



Figure 2-6. Alaska Airlines Passenger Terminal



Figure 2-6. Ahkovak Street in Front of the Alaska Airlines Terminal

In 2022, the 0.625-mile section of Ahkovak Street on airport property was raised, reconstructed, and paved. This street continues to experience congestion, particularly when Alaska Airlines flights arrive. Some airport users indicated the raised road caused steeper slopes when accessing adjacent properties and affected drainage.



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The NSBSAR hangar receives access from Opik Street.

Apayauk Street provides access from the north side of the airport to the south side, where there is currently limited airport development. Security Gates 1 and 2 are on this road. A new road was extended from Apayauk Street to the new ARFF/SREB on the south side.

The three public parking lots are on the north side of Ahkovak Street because the lots to the south have limited space for parking. The lots and size are:

- Block 200, Lot 3 – 14,400 square feet
- Block 200, Lot 5A – 12,600 square feet
- Block 400, Lot 8 – 10,800 square feet.

There is also a 7,200-square-foot informal parking lot in Block 400, Lot 8A, leased by Alaska Airlines. The presence of inoperable vehicles reduces the number of available parking spaces in these parking lots.

Ground Transportation Services

Car rentals are available through UIC Car Rental and King Eider Inn, on the north side of Ahkovak street on airport property. Cab companies include Alaska Taxi, Arctic Cab, Barrow Taxi, and City Cab. The NSB operates a bus transit system that serves the airport.

Utilities

Water, sewer, electric, natural gas, telephone, data, and solid waste disposal services are provided at BRW by the companies listed in Table 2-12. The environmentally sensitive Isatkoak Lagoon, on the east side of the airport, is the potable water source for the airport and community.

Table 2-12. Utility Service Providers at BRW

| Utility | Provider |
|----------------------|---------------------|
| Water | BUECI |
| Sewer | BUECI |
| Electric Service | BUECI |
| Natural Gas | BUECI |
| Telephone | ASTCI and GCI |
| Data | ASTCI and GCI |
| Solid Waste Disposal | North Slope Borough |

Source: Wiley Post-Will Rogers Memorial Airport Master Plan Update, January 2014
BUECI = Barrow Utilities and Electric Cooperative, Inc.; ASTACI = Arctic Slope Telephone Association Cooperative, Inc.; GCI = GCI Communication Corporation



2.9 Airport Maintenance and Operations

2.9.1 Personnel

Airport maintenance and operations are provided by six on-site DOT&PF staff, who are responsible for airfield snow removal, de-icing and sanding, maintenance of the paved and unpaved surfaces, wildlife management, security and badging, and responding to emergencies. The six staff members comprise two crews working opposite shifts, so at any given time there are between 1 and 3 personnel staffed at BRW. Staff reside at the ARFF/SREB building while working week-long shifts. Staff are cross trained in ARFF as well as their regular maintenance and operations duties. Staff are positioned to respond to emergencies during air carrier landings and takeoffs. Law Enforcement Officer (LEO) support at BRW is provided by the NSB Police Department; however, there is no LEO agreement in place stating the NSB Police Department will support the airport.

The Airport Security Coordinator (ASC), who is also the Airport Manager, is classified as a Maintenance Foreman and is part of the working maintenance crew. An alternate on-site ASC is also available, and this role is filled by a rural airport maintenance lead. One of the two is always available for on-site response. BRW airport staff are organized within the Northern Region of Alaska DOT&PF and overseen by a Regional Maintenance and Operations Superintendent based in Fairbanks.

2.9.2 Security and Fencing

A 10-foot tall (or taller) security fence runs from near the localizer on the east end of the runway, along the north side of the apron, and wraps around the west end of the runway. Typical fencing is shown in Figure 2-8. The remainder of the airfield remains unfenced, which is a FAA/TSA compliance issue for both wildlife and unauthorized access. The perimeter fence and gates are inspected daily by airport staff.

BRW has seven active pedestrian access gates and 10 perimeter vehicle gate access points directly controlled by DOT&PF. Upon investigation, project staff identified three tenants with a combined total of 20 restricted area lease lot access points. (DOWL 2021)



Figure 2-7. Security Fencing at BRW

BRW has approximately 44 restricted area access points, with approximately 54 percent controlled by DOT&PF and the remainder tenant-controlled. Of the total restricted area access points, 17 are fenceline access points, 20 are within tenant facilities, and nine are within the passenger terminal facility (DOWL 2021).



Weather-related access control system problems include fog interference with communications, blowing snow issues that force gates closed and become stuck shut, frost that prevents gates from closing, and wind issues that prevents gates from closing. These conditions result in airport users forcing the gate open and sometimes breaking it and causing the electric gate controls to stop working. Additionally, there are issues with some card readers that will not work, and there is no local card reader storage.

2.9.3 Snow Removal and Storage

BRW typically experiences snow between September/October until May. Snow is stored between the runway and the taxiway. Drainage is sufficient if ramps are kept plowed. Frost heave in areas underlain by permafrost causes undulations on the runway and the safety area edges erode into the infield areas. Large snow events can shut down the runway. Increasing the number of DOT&PF personnel could potentially help with this issue.

Snow removed from the apron is pushed into the unpaved areas between Taxiways A, B, and C. DOT&PF removes snow up to 50 feet from leaseholder buildings. Leaseholders are responsible for removing the snow within 50 feet of their buildings. Snow on the runway is swept or blown beyond the safety areas into the surrounding tundra. No snow is trucked off-airport. M&O personnel report snow drifting off the west end of Runway 8 because of the security fence.

2.9.4 Maintenance and Operations Buildings

ARFF, snow removal, and other airport maintenance and operations responsibilities are carried out by DOT&PF staff from a combined ARFF/SREB facility. The old ARFF/SREB on the north side of the airport is being sold and DOT&PF has moved into the new ARFF/SREB, completed in 2022, on the south side of the airport. The airport is classified as Class 1 ARFF Index B and is staffed to provide ARFF services at this level during air carrier operations only. Sleeping, cooking, and entertainment space for airport staff are also provided in the ARFF/SREB.

2.9.5 Equipment

DOT&PF maintenance and snow removal equipment at BRW is listed below.

- 1975 AD6L62 PU RCAB 4X4 3/4
- 1988 AC1420 SANDER 1 ½ CY
- 1994 350 SLOPER GRDR
- 1994 866MDP U/VPLOW GRADER/
- 1994 2019-04-20 04:00:00.000
SNOWPLOW 18+ AI
- 2001 LMBL6 U-BLADE LDR 12C
- 2001 LGP10 SNOWBUCKET LDR
- 2001 PF9670 FORKS LOADER



Figure 2-9. Loader at BRW



- 2007 P7 SANDER 1 1/2CY
- 2007 MSV1568450 SANDER 6CY
- 2017 TW3025 Pass Boarding R
- 2017 ROADLAZER LANE STRIPER, SL
- 1994 720 GRADER 30,000#
- 1995 L150 LOADER WHL 4.5
- 1996 PRO2000 TRK CHEMICAL
- 1997 H2718B ROTARY PLW TKMT
- 2003 RA280HC SNOBLWR LMT +15
- 2007 F57 TRK 17.5K 4X4
- 2007 5500I TRK DUMP 8CY 6X
- 2009 SNOGOMP318 SNOBLWR LMT +15
- 2012 W3B PU CCAB 4X4 1T
- 2013 7500SFA BROOM RWY SELF,
- 2013 12M2 GRADER 35,000#,
 - 2015 MB2 TRK PLOW ARPT 4
 - 2015 4620CRDL BROOM RUNWAY TO
 - 2016 12M43 PU CCAB 4X4 1/2
 - 2018 950M LOADER WHL 3 TO
 - 2003 MK2 TRAILER, FRIC M
 - 2011 BLAZER TRLR TRAVEL
 - 2011 SS125D ASPHALT HEATKET

2.9.6 ARFF

BRW also has two ARFF vehicles: a 2006 HPR3000 and a 2019 3000Striker. BRW is a Part 139 Certified Airport and as such is required to have firefighting agents such as water, foam, Halotron, etc. available at specified volumes, rates, and response times. The ARFF vehicle carries 3,000 gallons of water, 700 pounds of dry extinguishing agent, and 500 gallons of foam. BRW is Index B and complies with Part 139 requirements.

2.10 Surrounding Property Ownership and Land Uses

The NSB established a Barrow Zoning Commission comprised of residents of Utqiagvik and the NSB. The airport property is zoned Industrial and north of airport property, land is zoned as Suburban and Multi-Use. The Suburban zone runs along the eastern end of the existing airport



lease lots. South of the Industrial zone area the airport is zoned Residential, but this land is made up of extensive wetlands and is mostly undeveloped. This area includes an abandoned gas line and some cultural sites.

NOAA maintains a facility inside airport property along the southern border on Emaiksoun Road. Land south of the airport boundary is owned by UIC.

Isatkoak Lagoon is east of the runway on airport property and is the potable water supply for Utqiaġvik. When the lagoon freezes in winter, it is used to access land to the south for subsistence activities. There are two material sites, one airport property, and the other 0.5 mile south of BRW owned by NSB. There are two gravel pits owned by UIC, one is west-southwest of the airport, and one is east of the lagoon.

2.11 Environmental Conditions

This section addresses environmental conditions of BRW and resource categories consistent with FAA Order 1050.1F. The discussion addresses a project area defined as the airport property boundary.

2.11.1 Air Quality

The U.S. Environmental Protection Agency (EPA) sets ambient air quality standards for six criteria air pollutants known to impact human health². The project area currently meets all of these standards. Utqiaġvik is not listed as a non-attainment area according to the EPA designated non-attainment areas for Clean Air Act (CAA) National Ambient Air Quality Standards (EPA 2023). The proposed improvements are unlikely to alter the attainment status of the area.

2.11.2 Biological Resources

2.11.2.1 Threatened and Endangered Species

Federally threatened or endangered species present in the project area include the spectacled eider (*Somateria fischeri*), Steller's eider (*Polysticta stelleri*), and polar bear (*Ursus maritimus*) (U.S. Fish and Wildlife Service [USFWS] 2023a). The project area is within listed as critical habitat for polar bear. Polar bears frequent nearshore waters around Nuvuk (also known as Point Barrow) in the spring and fall but are considered uncommon in the project area due to wildlife hazing, lack of garbage on airport property, and unsuitable wildlife habitats (ABR 2015). Between 1991 and 2010, no spectacled eiders nests were reported near the project area. No Steller's eiders have been identified between 2007 and 2015 within BRW area, though prior to 2007 several nests were found east and within 1,300 feet of the maintenance and operations facility. Spectacled eiders prefer shallow open water without islands, deep permafrost-formed wetland polygons, and grass wetlands while Steller's eiders prefer deep permafrost-formed

² Environmental Protection Agency. 2024. *Environments and Contaminants - Criteria Air Pollutants*. Viewed January 2024 at [https://www.epa.gov/americaschildrenenvironment/environments-and-contaminants-criteria-air-pollutants#:~:text=The%20six%20most%20common%20air,sulfur%20dioxide%20\(SO2\).](https://www.epa.gov/americaschildrenenvironment/environments-and-contaminants-criteria-air-pollutants#:~:text=The%20six%20most%20common%20air,sulfur%20dioxide%20(SO2).)



wetland polygons and flooded grass wetlands. Any proposed project would consult with USFWS to determine if informal or formal consultation under Section 7 of the Endangered Species Act (ESA) is warranted. No additional ESA marine mammals occur with the project area. Master plan development could require the area of potential affect to extend off property. Consultation would likely result in measures to minimize impacts.

2.11.2.2 Fish and Wildlife Resources

The project area provides habitat for mammals including caribou (*Rangifer tarandus*), musk ox (*Ovibos moschatus*), wolverine (*Gulo gulo*), and arctic fox (*Vulpes lagopus*) (North Slope Borough 2023).

2.11.2.3 Anadromous Fish Streams and Essential Fish Habitat

The Alaska Department of Fish and Game (ADF&G) anadromous waters catalog identifies no anadromous waterbodies or streams within the project area (ADF&G 2023). No essential fish habitat is located within the project area or adjacent in waterbodies including the Chukchi Sea and Isatkoak Lagoon (NOAA 2023). Isatkoak Lagoon is divided into three sections that are divided by a causeway, with the lower portion used as a wastewater lagoon. The upper and middle portions have been documented to support ninespine stickleback (*Pungitius pungitius*) (ABR 2013).

2.11.2.4 Birds

Over 175 species of birds have been identified in and around Utqiaġvik, Alaska (Cornell 2021). Table 2-13. Utqiaġvik Alaska eBird List

lists species documented in the eBird field checklist.

Table 2-13. Utqiaġvik Alaska eBird List

| Shorebirds | | |
|------------------------|------------------------|-------------------------|
| black-bellied plover | spotted sandpiper | buff-breasted sandpiper |
| American golden-plover | solitary sandpiper | sanderling |
| Pacific golden-plover | gray-tailed tattler | dunlin |
| golden-plover sp. | wandering tattler | purple sandpiper |
| semipalmated Plover | wood sandpiper | Baird's sandpiper |
| killdeer | greater yellowlegs | little stint |
| common ringed plover | lesser yellowlegs | least sandpiper |
| semipalmated sandpiper | ruddy turnstone | white-rumped sandpiper |
| plover sp. | black turnstone | pectoral sandpiper |
| whimbrel | red knot | western sandpiper |
| Eskimo curlew | ruff | semipalmated sandpiper |
| bar-tailed godwit | curlew sandpiper | peep sp. |
| Hudsonian godwit | stilt sandpiper | calidris sp. |
| long-billed dowitcher | Temminck's stint | shorebird sp. |
| common snipe | spoon-billed sandpiper | red phalarope |
| Wilson's snipe | red-necked stint | red-necked phalarope |



| | | |
|---|----------------------------------|------------------------------------|
| Waterfowl | | |
| emperor goose | American wigeon | surf scoter |
| snow goose | mallard | white-winged scoter |
| greater white-fronted goose | northern pintail | white-winged/Stejneger's scoter |
| snow x greater white-fronted goose (hybrid) | green-winged teal | black scoter |
| tundra bean-geese | canvasback | scoter sp. |
| brant | redhead | long-tailed duck |
| cackling goose | tufted duck | bufflehead |
| Canada goose | greater scaup | common goldeneye |
| trumpeter swan | lesser scaup | common merganser |
| tundra swan | Steller's eider | red-breasted merganser |
| blue-winged teal | spectacled eider | Cranes |
| northern shoveler | king eider | sandhill crane |
| gadwall | common eider | Grebes |
| Eurasian wigeon | harlequin duck | horned grebe |
| Cormorants and Anhingas | Herons, Ibis, and Allies | red-necked grebe |
| pelagic cormorant | great egret | Wood-Warblers |
| Cardinals, Grosbeaks, & Allies | Skuas and Jaegers | Northern waterthrush |
| Scarlet tanager | long-tailed jaeger | orange-crowned warbler |
| Grouse , Quail, and Allies | parasitic jaeger | common yellowthroat |
| willow ptarmigan | pomarine jaeger | palm warbler |
| rock ptarmigan | parasitic/pomarine jaeger | yellow-rumped warbler |
| ptarmigan sp. | Jaeger sp. | Canada warbler |
| | | Wilson's warbler |
| Alcids | | |
| tufted puffin | Kittlitz's murrelet | common murre |
| horned puffin | black guillemot | thick-billed/common murre |
| crested auklet | dovekie | large alcid sp. |
| parakeet auklet | thick-billed/common murre | alcid ap. |
| Gulls, Terns, and Skimmers | | |
| Ross's gull | short-billed gull | glaucous-winged gull |
| black-legged kittiwake | herring gull | slaty-backed gull |
| black-legged/red-legged kittiwake | great black-backed gull | Iceland gull |
| | | herring/Iceland gull |
| Ivory gull | glaucous gull | larus sp. |
| Sabine's gull | herring x glaucous gull (hybrid) | arctic tern |
| Loons | Old World Flycatchers | Vultures, Hawks, and Allies |
| Red-throated loon | bluethroat | Northern harrier |
| Pacific loon | Siberian rubythroat | Bald eagle |
| Common loon | Northern wheatear | Swainson's hawk |



| | | |
|---|---------------------------------------|--|
| Yellow-billed loon | Owls | Rough-legged hawk |
| Petrels, Shearwaters, and Diving Petrels | snowy owl | Shrikes |
| | short-eared owl | Northern shrike |
| Northern fulmar | Jays, magpies, crows/Ravens | Leaf & Sylviid Warblers |
| Short-tailed shearwater | Common raven | Arctic warbler & old world warbler sp. |
| Catbirds, mockingbirds, and thrashers | Blackbirds | Longspurs and Snow Buntings |
| | Bobolink | Lapland longspur |
| Brown thrasher | Rusty blackbird | Smith's longspur |
| | Common grackle | Snow bunting |
| Falcons and Caracaras | | |
| American kestrel | peregrine falcon | small falcon sp. |
| merlin | large falcon sp. | falcon sp. |
| Martins and Swallows | Wagtails and Pipits | Tyrant flycatchers: Pewees, Kingbirds, and Allies |
| bank swallow | eastern yellow wagtail | olive-sided flycatcher |
| tree swallow | white wagtail | western wood-pewee |
| barn swallow | red-throated pipit | yellow-bellied flycatcher |
| cliff swallow | American pipit | alder flycatcher |
| | | least flycatcher |
| | | eastern kingbird |
| Thrushes | Finches, Euphonias, and Allies | New World Sparrows |
| mountain bluebird | brambling | chipping sparrow |
| varied thrush | gray-crowned rosy-finch | American tree sparrow |
| gray-cheeked thrush | common redpoll | fox sparrow |
| hermit thrush | hoary redpoll | dark-eyed junco |
| American robin | common/horary redpoll | White-crowned sparrow |
| fieldfare | pine siskin | golden-crowned sparrow |
| dusky thrush | American goldfinch | Harris's sparrow |
| | Others | Savannah sparrow |
| | passerine sp. | Lincoln's sparrow |

Source: eBird. Cornell University. <https://ebird.org>. Accessed August 2024.

2.11.2.5 State-Listed Species of Special Concern

Over 25 species of migratory birds are listed as bird species of conservation concern in the project area (USFWS 2023a). In the spring, birds transit north through the Brooks Range to the North Slope of Alaska, where they can breed in more protected areas. For migrant birds, chicks become flight-ready before the end of fall to make the journey south. Bird species of conservation concern are listed in Table 2-14.

Table 2-14. Utqiagvik, Alaska Bird Species of Conservation Concern

| Common Name | Scientific Name | Breeding Season |
|------------------------|---------------------------------|-------------------------|
| American golden-plover | <i>Pluvialis dominica</i> | Breeds May 20 to Aug 15 |
| bald eagle | <i>Haliaeetus leucocephalus</i> | Breeds Feb 1 to Sep 30 |
| bar-tailed godwit | <i>Limosa lapponica</i> | Breeds May 15 to Aug 15 |



| Common Name | Scientific Name | Breeding Season |
|------------------------|--------------------------------|-------------------------|
| black guillemot | <i>Cephus grylle</i> | Breeds May 15 to Sep 10 |
| black scoter | <i>Melanitta americana</i> | Breeds elsewhere |
| black-legged kittiwake | <i>Rissa tridactyla</i> | Breeds elsewhere |
| common eider | <i>Somateria mollissima</i> | Breeds Jun 1 to Sep 30 |
| common loon | <i>Gavia immer</i> | Breeds Apr 15 to Oct 31 |
| common murre | <i>Uria aalge</i> | Breeds Apr 15 to Aug 15 |
| dovekie | <i>Alle alle</i> | Breeds elsewhere |
| dunlin | <i>Calidris alpina arctica</i> | Breeds elsewhere |
| golden eagle | <i>Aquila chrysaetos</i> | Breeds Jan 1 to Aug 31 |
| ivory gull | <i>Pagophila eburnea</i> | Breeds elsewhere |
| long-tailed duck | <i>Clangula hyemalis</i> | Breeds elsewhere |
| pomarine jaeger | <i>Stercorarius pomarinus</i> | Breeds elsewhere |
| red phalarope | <i>Phalaropus fulicarius</i> | Breeds elsewhere |
| red-breasted merganser | <i>Mergus serrator</i> | Breeds elsewhere |
| red-necked phalarope | <i>Phalaropus lobatus</i> | Breeds elsewhere |
| red-throated loon | <i>Gavia stellata</i> | Breeds elsewhere |
| Ross's gull | <i>Rhodostethia rosea</i> | Breeds elsewhere |
| snowy owl | <i>Bubo scandiacus</i> | Breeds May 15 to Sep 30 |
| surf scoter | <i>Melanitta perspicillata</i> | Breeds elsewhere |
| thick-billed murre | <i>Uria lomvia</i> | Breeds Apr 15 to Aug 15 |
| white-winged scoter | <i>Melanitta deglandi</i> | Breeds elsewhere |
| yellow-billed loon | <i>Gavia adamsii</i> | Breeds Jun 1 to Sep 20 |

2.11.2.6 Marine Mammals

No marine mammals except the polar bear are present in the project area according to the USFWS (2023a). Please see Section 2.11.2.1 for a description of polar bear critical habitat. The project area extends to the coastline of the Chukchi Sea. There were anecdotal reports of a seal on the runway several years ago.

2.11.2.7 Climate

Climate in the project area is considered a tundra climate zone and receives an average of 4.5 inches per year of total precipitation measured as rain, of which 37.7 inches falls as snow per year. The average temperature in July is 40.9 degrees Fahrenheit (°F), and in February -14.2°F. Prevailing winds blow from east to northeast. The Northern Climate Report projects



Utqiagvik will have an average annual temperature increase of about 18°F by the end of the century, winter temperatures increasing by 31°F, and more precipitation in the summer³.

The CAA administered by the EPA regulates greenhouse gas (GHG) emissions from surface transportation vehicles and stationary power generation sources. Six GHGs are regulated under the CAA: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). CO₂ makes up the majority of airport GHG emissions. The Wiley Post-Will Rogers Memorial Airport currently emits CO₂ from operations such as airport vehicles and ground support equipment, fossil fuel consumption for building electricity and heating, jet fuel for auxiliary power units that power aircraft at airport gates, and other sources. A Climate Change/GHG analysis would be warranted for any substantial changes to aircraft fleet mix. Climate change impacts can be mitigated by maintaining surrounding wetlands, modifying operations protocols (less idle time, etc.), and transitioning to electric vehicles and ground service equipment when possible.

The Council on Environmental Quality Climate Change Guidelines (2023) requires an assessment of any development's resiliency to impacts from climate change (e.g., wildfires, increased flooding, melting permafrost, increased storm severity) to be included in environmental analysis under the National Environmental Policy Act (NEPA). Projected impacts of climate change for the North Slope include increased temperatures particularly in the fall and winter and increase in precipitation, particularly in the summer. Infrastructure proposals would need to consider warmer, wetter conditions for climate change resiliency⁴.

2.11.3 Coastal Resources

Alaska's participation with the national Coastal Zone Management Act (known as the Alaska Coastal Management Program) ended on June 30, 2011. There are no coastal barriers within the state of Alaska and the project is not located within marine waters (USFWS 2021).

Therefore, no coastal resources would be affected by the project. The project conforms to the 2019 NSB Comprehensive Plan and the 2021 ADNR North Slope Area Plan for State Lands.

2.11.4 Department of Transportation Section 4(f)

2.11.4.1 State Refuges, National Wildlife Refuges, Critical Habitat Areas, and Sanctuaries

The ADNR ownership map Alaska Mapper was reviewed in February 2023 for the presence of any of publicly owned lands including public parks, recreation areas, wildlife or waterfowl refuges of national, state, or local significance. The Arctic National Wildlife Refuge is the nearest wildlife refuge within 300 miles, and the Iñupiat Heritage Center is the nearest National Park

³ University of Alaska Fairbanks and Alaska Climate Adaptation Science Center. 2024. *Northern Climate Reports. Projected Conditions for Utqiagvik (Barrow)*. Viewed January 2024 at <<https://northernclimatereports.org/report/community/AK418#results>>.

⁴ Ballinger, Thomas J., Bhatt, Uma S., Bieniek, Peter A., Brettschneider, Brian, Lader, Rick T., Littell, Jeremy S., Thoman, Richard L., Waigl, Christine F., Walsh, John E., and Melinda A. Webster. 2023. *Alaska Terrestrial and Marine Climate Trends, 1957-2021*. American Meteorological Society.



Service facility in Utqiagvik. No lands under Section 4(f) would be impacted by the proposed improvements.

2.11.5 Prime and Unique Agriculture/Farmlands

There is no prime or unique farmland, nor farmland of state or local importance in the vicinity of the project (Natural Resources Conservation Service (NRCS) 2021).

2.11.6 Hazardous Materials, Pollution Prevention, and Solid Waste

Hazardous spills have been documented over the years in the project area. Three contaminated sites are listed in the State of Alaska Department of Environmental Conservation (ADEC) contaminated sites database (2023). One site associated with a spill has been remediated and closed and one site within an existing developed area of the airport is also closed with Institutional Controls. This closure level means no further investigation or remediation is required as long as the site is operated in compliance with approved control measures designed to protect people and the environment from exposures to contaminants potentially remaining after completion of cleanup activities.

Perfluorooctane sulfonic acid (PFOS), PFAS, and perfluorooctanoic acid (PFOA) are contained in numerous everyday items produced since the 1950s (e.g., stain resistant treatments, waterproof treatment, food packaging, nonstick cookware). Many aqueous film-forming foams (AFFF) (fire suppressants) also contain PFOS and PFAS. The only one active site has documented PFAS contamination. Because PFAS presence is established the following will occur: implementation of a temporary solution for drinking water source; engagement of public and stakeholders; engineering and design for remediation solutions; development of alternative permanent water supply concepts; and identification of site and contaminant plume. In 2016, the ADEC published cleanup levels for PFOA and PFOS alongside EPA guidance on lifetime health advisory levels (HALs) for drinking water.

ADEC Action Level is:

- PFOS+PFOA = above 0.07 micrograms per liter ($\mu\text{g/L}$)

EPA health advisory levels (HAL) for PFOA and PFOS are:

- Interim updated HAL for PFOA: .004 parts per trillion (ppt)
- Interim updated HAL for PFOS: .02 ppt

State of Alaska and EPA regulations and guidance for identifying, sampling, or disposing of PFOS, PFAS, and PFOA include:

- 18 AAC 75.341 Soil Cleanup Levels
- 18 AAC 75.345 Groundwater and Surface Water Cleanup Levels
- ADEC



- Field Sampling Guidance⁵
- Site Characterization Work Plan and Reporting Guidance for Investigation of Contaminated Sites⁶
- EPA
 - Proposed regulations for six PFAS compounds to reduce risk of exposure to PFOS and PFOA in drinking water
 - *PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024*
 - *Method 537.1: Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry*
 - *Method 533: Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Isotope Dilution Anion Exchange Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry*
 - *Method 8327 (SW-846): Per- and Polyfluoroalkyl Substances (PFAS) by Liquid Chromatography/Tandem Mass Spectrometry*
 - *Method 3510c (SW-846): Separatory Funnel Liquid-Liquid Extraction*
- Interstate Technology Regulatory Council
 - Sampling Precautions and Laboratory Analytical Methods for Per- and Polyfluoroalkyl Substances (PFAS)
- DOT&PF
 - Statewide PFAS General Work Plan
 - Data-Validation Program Plan

PFAS contamination is likely on the DOT&PF airport property in the form of AFFF used as a fire retardant that led to sampling Isatkoak Reservoir, the source of drinking water for the community. The greatest concentration was repeatedly detected at the eastern end of the runway, where it meets the reservoir (Figure 2-10: Hazard ID 26873). Analysis of samples collected at this location one month apart indicated concentrations were significantly above other samples and exceeded the ADEC combined PFAS action level of 70 µg/L and the EPA Lifetime Health Advisor of 70 µg/L for PFOA and PFOS. A sampling and analysis plan was developed in September 2022 for soil sampling for PFAS in preparation for excavation of soils for an asphalt repair project (ADEC 2023). Other potential sources of contamination for AFFF included storage areas, systems testing areas, and unidentified locations where AFFF was believed to have been deployed (DOT&PF 2023).

⁵ Alaska Department of Environmental Conservation. 2024. *Field Sampling Guidance. Division of Spill Prevention and Response. Contaminated Sites Program.*

⁶ Alaska Department of Environmental Conservation. 2017. *Site Characterization Work Plan and Reporting Guidance for Investigation of Contaminated Sites. Division of Spill Prevention and Response. Contaminated Sites Program.*



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Figure 2-10. ADEC Contaminated Sites

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Solid waste is disposed of in a Class II municipal solid waste landfill 6 miles southwest of Barrow or in a thermal oxidation system incinerator for municipal waste. Table 2-15 lists ADEC - listed contaminated sites within the project area.

Table 2-15. ADEC-Listed Contaminated Sites within the Project Area

| ADEC Hazard ID No. | Site Name | Site Address | Type Status |
|--------------------|--------------------------------------|--------------------------|---|
| 2325 | MarkAir - Utqiagvik | BRW | Cleanup Complete - Institutional Controls |
| 26792 | ADOT&PF BRW Sitewide PFAS | 1747 Ahkovak Street; BRW | Active |
| 26873 | Alaska Airlines BRW Lot 2A Block 300 | 1737 Ahkovak Street | Cleanup Complete |

2.11.7 Historical, Architectural, Archeological, and Cultural Resources

A March 2023 desktop review of the ADNR Alaska Heritage Resources Survey (AHRs) online database determined there are eight AHRs historic resource sites within the boundaries of the airport property. Five sites represent pre-colonial land use. One of these sites, the Utqiagvik Village site, has been evaluated and determined eligible for the National Register of Historic Places (NRHP). Intersecting the northwest corner of the project area, the two-acre site represents approximately 5,000 years of continuous occupation and includes house, midden, and burial mounds. Three additional sites represent prehistoric burials or scattered human skeletal remains, none of which have been evaluated for determination of eligibility for the NRHP. The final prehistoric site is the location of paleontological mammoth remains and, unless the site has been modified by humans (e.g., includes archaeological artifacts), the mammoth remains are not eligible for listing by the NRHP. Of the three historic period sites, one has been evaluated for NRHP eligibility: a historic camp site with associated debris scatter. It was determined not eligible for listing for NRHP. The other two historic sites have not been evaluated: a historic grave site undated to a specific period and a warehouse built in 1975.

2.11.8 Land Use

BRW is the main airport in the region providing cargo, freight, fuel, and passenger services. Under NSB transportation planning in the 2019 *North Slope Borough Comprehensive Plan 2019-2039*, BRW is zoned as Industrial district and is owned and maintained by the State of Alaska (Figure 2-11). Surrounding land use consists of suburban and multi-use to the north, suburban to the east, wetlands and undeveloped to the south, and the Chukchi Sea to the west. The city water supply, Isatkoak Lagoon, borders the east side of the runway and intersects the airport property boundary.

A February 2023 review of the BLM Spatial Data Management website indicated a 17(b) easement crosses the project area (BLM 2009).



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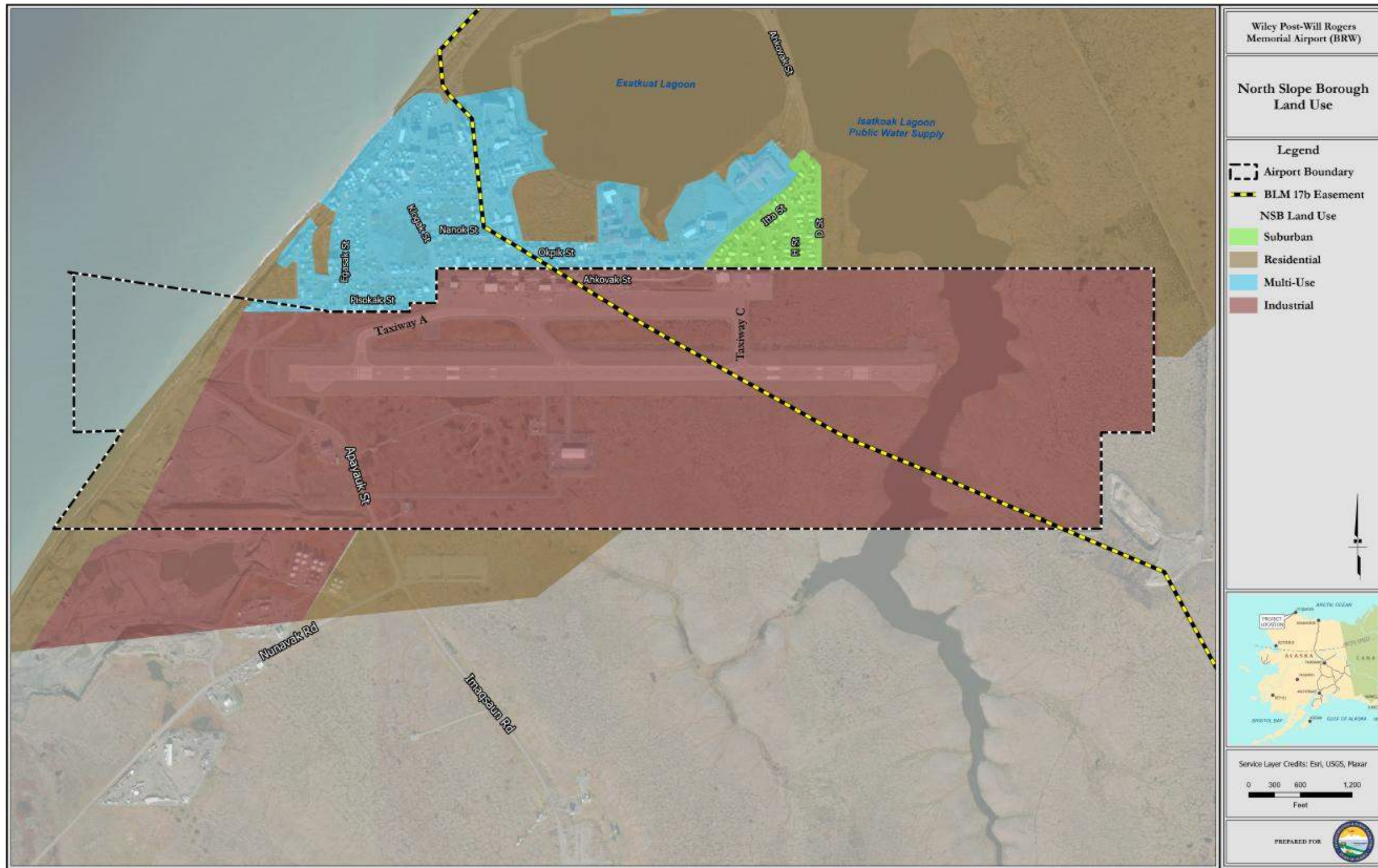


Figure 2-11. North Slope Borough Land Use

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2.11.9 Natural Resources and Energy Supply

Airport expansion would require gravel and fill material for fill pads and areas to be topped with asphalt paving. Construction and maintenance and operations would require a minimal demand on natural resources including gravel fill from a nearby material site(s) and a minor increase in energy consumption. Fuel would be required for construction vehicle operation and would be sourced from existing tank farms on airport property or fuel trucks.

2.11.10 Noise and Noise-Compatible Land Use

According to the FAA 1050.1F Desk Reference Version 3 if annual airport operations exceed 90,000 propeller operations or 700 jet operations, a noise analysis is required (Section 11.1.2). Approximately 16,000 annual propeller operations and 3,800 annual jet operations are forecasted by 2024. A preliminary noise analysis of proposed on-airport projects may be required if the 700 annual jet operations threshold is exceeded.

2.11.11 Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks

Utqiagvik, Alaska has a full-time population of 4,439 people according to the 2021 census (American Community Survey (ACS) 2021). The economy of Utqiagvik is dominated by government, healthcare, construction, and education industries that provide services to Utqiagvik and the wider NSB.

The 2015 Utqiagvik Comprehensive Plan identified overcrowding as a problem in Utqiagvik with the addition of two residential projects constructed in 2015 across Isatkoak Lagoon from the airport to alleviate the overcrowding.

In accordance with Executive Order (EO) 12898 (Environmental Justice), the residential projects were planned with consideration of impacts to minority and low-income populations. Due to the lack of development south and east of the airport, it is anticipated that any airport improvements would not have disproportionately high or adverse effects on minority or low-income populations.

In accordance with EO 13045 (Protection of Children from Environmental Health and Safety Risks), impacts to children were considered. Due to the lack of development south and east of the airport, it is anticipated that airport improvements would not create safety risks for children or impact their environmental health.

In accordance with EO 14096 (Revitalizing Our Nation’s Commitment to Environmental Justice for All), impacts to restoring and protecting a healthy environment were considered. Due to the lack of development south and east of the airport, it is anticipated that airport improvements would not have disproportionately high or adverse effects on maintaining a healthy environment for all people.

In accordance with EO 13985 (Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government), impacts to racial equity and underserved



communities were considered. Due to the lack of development south and east of the airport, it is anticipated that airport improvements would not have disproportionately high or adverse effects on communities that have long been underserved, discriminated against, or adversely affected by persistent poverty and inequality.

Airport improvements would have a beneficial impact on minority and low-income populations, children, and racial equity and support for underserved communities by providing safe and efficient travel of people, goods, and services.

2.11.12 Visual Effects

2.11.12.1 Light Emissions and Visual Impacts

BRW uses a variety of airport lighting to aid in navigation and approach procedures as described in Section 2.6.4. BRW uses rotating beacons, HIRL, MALSR, REIL, MITL, apron flood lighting, windsock, marking, precision approach path indicators and signage. Additional airport lighting would be required with expansion of airport infrastructure, increasing light emissions.

BRW does not have a tower that can be observed from the ground, but NAVAIDs including light based and electronic air NAVAIDs and antennae can be seen from outside the airport. Weather station equipment is also at the southwest side of the runway. A security fence is present along the north and west sides of the airport.

2.11.13 Water Resources

2.11.13.1 Wetlands and Vegetation

A February 2023 review of the USFWS National Wetlands Inventory (NWI) online Wetlands mapper information from 1979 depicts BRW as containing 569 acres of freshwater emergent wetlands, 10 acres of ponds, 15 acres of lakes, and one acre of stream channel (Figure 2-12). Greater than 82 percent of the undeveloped land in BRW is wetlands or other waters. A BRW Wetlands Mapping Review, Aquatic Site Assessment, and Wildlife Habitat Evaluation was completed by ABR in April 2015 and is publicly available (USFWS 2023b). However, there has been additional recent wetland mapping completed. An updated wetland mapping effort should be completed for BRW, as well as for any other contractor-proposed material site or offroad haul route. Vegetation consists of herbaceous and deciduous scrub shrub in wetlands, and scrub shrub in a small upland location between Isatkoak Lagoon and the runway (ABR 2015).



Figure 2-12. NWI Mapping

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2.11.13.2 Floodplains

The airport property has historically been unaffected by flooding⁷. Airport improvements would not impact floodplain values as hydrologic connectivity will be maintained. A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) online February 2023 revealed that no floodplain mapping exists for the project area.

2.11.13.3 Receiving Waters/Impaired Water Bodies/Water Quality

Surface waterbodies adjacent the project area flow west to the Chukchi Sea, or east and north to Isatkoak Lagoon. Isatkoak Lagoon provides the City of Utqiagvik and the airport’s drinking water supply that is treated at the existing BUECI water treatment plant. Protection of this drinking water source is critical to the community.

Several small, unnamed lakes and ponds within the airport property are hydrologically connected the Chukchi Sea or Isatkoak Lagoon. No waterbodies are listed as an impaired waterbody on the online ADEC 303(d) List of Impaired Waterbodies reviewed in February 2023.

2.11.13.4 Wild and Scenic Rivers

No wild and scenic rivers are within the project area.

2.11.14 Wildlife Hazards

According to the FAA Wildlife Strike Database, there have been 17 strikes with wildlife at BRW since 1996. This includes strikes mostly with birds, but reports include one incident with a bearded seal and one incident with a caribou. One strike between a glaucous gull and a Learjet 31 resulted in substantial damage

Current habitat management projects in the Barrow Wildlife Hazard Management Plan are listed in Table 2-16 and Table 2-17. The Barrow Wildlife Hazard Management Plan discusses other allowable measures for discouraging animals from entering airport property and measures for removal if needed.

Table 2-16. BRW Habitat Management Projects

| BRW Habitat Management Projects | Target Date |
|--|-------------------|
| Fill temporary standing water between ramp and runway, near Taxiway B and C. | 2024 |
| Replace infield grass with gravel. | As funding allows |
| As funding allows complete perimeter fence around airfield. | 2024 |

⁷ Alaska Department of Transportation & Public Facilities. 2011. Wiley Post-Will Rogers Memorial: Barrow Airport Emergency Plan.



Table 2-17. Ongoing Habitat Management Action at BRW

| Ongoing Habitat Management Actions at BRW | Target Date |
|--|-------------|
| Install grid wire or mylar tape over ponds. | Annually |
| Use a vehicle and if necessary, a “drag,” to discourage shorebird nesting in gravel areas. | Annually |
| Identify and destroy nests on and around the airfield to discourage nesting activity. | Annually |
| Ensure proper refuse containment is followed by BRW airport tenants. | Annually |

2.12 Related Plan Programs and Projects

This section addresses current community, tribal, borough, and regional plans along with oil and gas industry plans to be reviewed when considering development at BRW. The link to each plan is listed when available.

2.12.1 Wiley Post-Will Rogers Memorial Airport Master Plan Update, January 2014

[January 2014 AMP Update \(alaska.gov\)](http://alaska.gov)

In 1983, the first BRW Master Plan was completed, and the last update was completed in 2014. The 2014 CIP included:

0 to 5 years

- Runway Repair
- New Maintenance and Operations Facilities
- Apron Expansion
- Stormwater Management Plan
- South Side Parallel Taxiway

5 to 10 years

- South Side Apron and Access Road
- Airport Master Plan and Airport Layout Plan Update
- ARFF/SREB Expansion
- Runway Repaving



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10 to 20 years

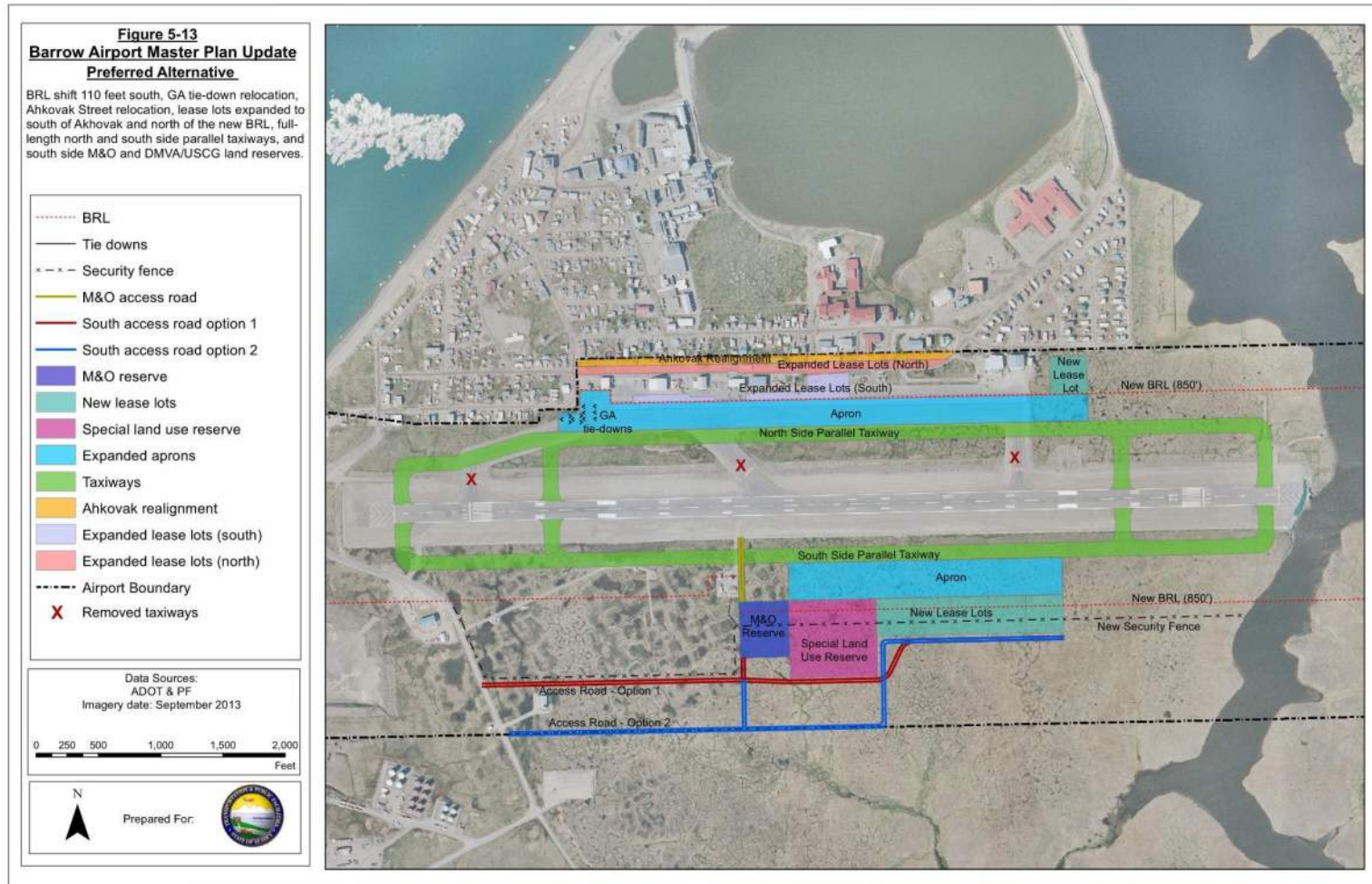
- South Side Apron Expansion
- North Side Parallel Taxiway
- Apron Repaving
- BRL Shift and Lease Lot Expansion
- Relocation of GA Tie Downs
- Ahkovak Street Realignment and Lease Lot Expansion

Since the 2014 update, the runway was repaired, new maintenance and operations facilities were constructed, the taxiway was rehabilitated, a second runway repair was completed, and the 2014 Airport Master Plan Update and ALP were completed. Figure 2-10 depicts the preferred alternative from the 2014 Wiley Post-Will Rogers Memorial Airport Master Plan Update.



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Source: Wiley Post-Will Rogers Memorial Airport Master Plan Update, January 2014

Figure 2-13. 2014 Barrow Airport Master Plan Update Preferred Alternative



2.12.2 2016 Barrow Long Range Transportation Plan, Native Village of Barrow

[Native Village of Barrow draft Long Range Transportation Plan \(nvb-nsn.gov\)](#)

This is a 20-year plan aiming to identify the community's current and future transportation needs in accordance with federal regulations and the Indian Reservation Roads Program Rule 25 CFR Part 170. This plan identifies congestion as an issue along Ahkovak Street in front of the airport. The top priority listed on this plan is to finish the East Barrow Shareholder Lot Road Construction project to create access to a new housing subdivision. One of the goals described in this plan states, "Collaboratively work with other community entities, such as the City of Barrow, NSB, and Taġiuġmiullu Nunamiullu Housing Authority (TNHA), as well as outside entities, such as DOT&PF and Bureau of Indian Affairs to effectively plan and coordinate projects and infrastructure," (Barrow Long Range Transportation Plan, 2016).

2.12.3 Barrow Comprehensive Plan 2015-2035

[Barrow Comp Plan March 2015 Final \(north-slope.org\)](#)

The Barrow Comprehensive Plan aims to guide the physical and economic growth and development of Barrow and the surrounding areas over a 20-year span from 2015 to 2035. This plan mentions a site south of the airport as a potential location for an alternative power source. It also discusses using land south of the airport for workforce housing for oil and gas workers or a location for the USCG. It lists the following airport priorities: improved passenger terminals, baggage claim, vehicle access, and cold storage building for sand and urea. Ahkovak Street relocation is a potential capital project for the 2025 - 2035 time frame. Another potential capital project is the expansion of the existing terminal.

2.12.4 Northwest Alaska Transportation Plan Update 2022

[NWATP Executive Summary \(alaska.gov\)](#)

The Northwest Alaska Transportation Plan Update 2022 was developed to identify transportation issues and needs and to guide investment decisions over the next 20 years for all of northwest Alaska. It provides recommendations for the aviation, roads/highways, marine/riverine, winter trails, and multimodal sectors of transportation at the regional, subregional and community/facility level. For BRW, it advises to extend the airport apron to the south and east. Funding programs listed for airfield and airport passenger facilities upgrades includes the Tribal Transportation Program, AIP; airport access roads may also use Better Utilizing Investments to Leverage Development (BUILD) Grants.

2.12.5 NSB Comprehensive Plan 2019-2039

[NSB Comprehensive Plan 2019-2039 \(north-slope.org\)](#)

The NSB Comprehensive Plan 2019-2039 aims to serve as a blueprint for future North Slope development with goals and implementation strategies to achieve that vision. It covers topics



including land use, natural resource management, the identification and preservation of historically and culturally significant lands, transportation and other infrastructure, healthcare, economic development, education, recreation, and housing.

Air travel within the NSB is expensive; one of the goals of this plan is to bring additional airlines to North Slope villages to increase competition, choice, efficiency, and reduce cost. A lack of terminal space at both Utqiagvik and Deadhorse was identified as an issue preventing new air carriers from entering the market and creating competition. This plan mentions that if NSB could assume operations of State-run (DOT&PF) airports, it would provide airport land leasing that supports aviation uses, unify leasing standards around fair market rent, and use NSB Public Interest Determination contracting for services.

Another goal listed in this plan is to coordinate with DOT&PF on lease areas and street realignment to improve traffic congestion due to airport loading and unloading. This plan also identifies Utqiagvik as the potential marine port site for the NSB, which could serve as a hub for Arctic multi-modal transportation.

2.12.6 2019 Alaska Aviation System Plan

[Alaska Aviation System Plan - Phase II Documents \(alaskaasp.com\)](#)

The AASP aims to develop, maintain, operate, and manage Alaska's airport system in a way that provides safe and efficient travel of people, goods, and services. It identifies needed airport improvements, establishes funding priorities, proposes aviation policy, records the existing system, and provides continuous support through special studies, updates, and reviews.

2.12.7 2020 Comprehensive Economic Development Strategy

[Economic Development - Native Village of Barrow \(nvb-nsn.gov\)](#)

This plan strives to create opportunities for economic growth and strengthen economic resilience through the collaboration of regional stakeholders. One of the goals of this plan is to grow the tourism industry, which would require air travel for tourists to access Utqiagvik. Other transportation-related goals include planning a permanent road to Atqasuk and planning for the Barrow Deep Sea Port.

2.12.8 2020 National Petroleum Reserve in Alaska Integrated Activity Plan

[Final National Petroleum Reserve in Alaska \(NPR-A\) Integrated Activity Plan and Environmental Impact Statement, Volume I \(blm.gov\)](#)

[National Petroleum Reserve in Alaska Integrated Activity Plan Record of Decision 2022 \(blm.gov\)](#)

The NPR-A is nearly 23 million acres of public lands in northern Alaska that contains oil and gas leasing sites mostly managed by BLM. The BLM produced the Integrated Activity Plan (IAP) that identifies which lands are open to oil and gas leasing, lease stipulations, and required operating



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procedures based on the goal of finding an appropriate balance of promoting development while protecting surface resources. This plan identifies five alternative resource management plans, Alternatives A through E. On December 31, 2020, Alternative E was adopted; however, on January 20, 21 EO 13990 was issued, and this alternative was inconsistent with that policy. In April 2022, Alternative A was adopted with clarifications and modifications outlined in Appendix C of the Record of Decision. Alternative A was to continue managing the NPR-A consistent with the way that was described in the previous plan approved in 2013, which allocated 11.8 million acres for oil and gas leasing. It also designated lands available for oil and gas infrastructure to connect to the Trans-Alaska Pipeline System.

According to this plan, there are lands near Utqiagvik open to fluid mineral leasing; however, the BLM does not have surface authority over these lands. This plan does not dictate management of the subsurface oil and natural gas estate of the North Slope Borough near Utqiagvik or U.S. Navy lands near Point Barrow (i.e., Nuvuk).

2.12.9 2017-2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program

[2017-2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program \(boem.gov\)](https://www.boem.gov)

The Bureau of Ocean Energy Management (BOEM) administers the leasing program for oil and gas resources on the Outer Continental Shelf (OCS) and developed the 2017-2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program. This plan does not identify any lease sales in the Chukchi Sea or Beaufort Sea. There currently is no leasing program for 2023-2028.



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